Time: 3-hour **Max. Marks: 80**

N.B

1. **Q.1 is compulsory**
2. **Attempt any three from the remaining five questions.**
3. **Each Question carries 20 marks.**
4. **Assume suitable data, if required and state it clearly.**

Q 1 Attempt **any four** (20 marks)

a. Illustrate different types of keyword-based queries.
b. Compare boolean model and vector model
c. Discuss concept of Text search engine
d. Explain inverted file indexing with suitable examples

Q 2 . Attempt all. (20 marks)

a. State the different types of queries. Explain the pattern matching query concept with an example.
b. Explain the taxonomy of Information retrieval model with classification diagram.

Q3 . Attempt all. (20 marks)

a. What is the significance of **tf** and **idf**? How can you calculate tf and idf in a vector model?
b. Explain ranking and similarity measures with suitable example.

Q.4. Attempt all. (20 marks)

a. Describe the process of creating an inverted index. How can this be optimized with the help of block addressing?
b. Discuss starting points. Explain list of collection and overviews in detail.

Q 5. Attempt all. (20 marks)

a. What is flat browsing and hypertext browsing? Explain.
b. Define Multimedia information retrieval. Discuss indexing and searching.

Q 6 . Write short not on : (20 marks)

a. Interface support for the search process
b. Sequential searching
c. User relevance feedback
d. Information Retrieval in digital libraries.

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